|  |  |  |  |
| --- | --- | --- | --- |
| Mr. Michael T. Davis  WLPCS Pre-Calculus | | 2.9 Asymptotes, Axis Intercepts, and Discontinuities (3)  February 14-15, 2018 | |
| Name: | |

Directions: For each rational function:

1. Identify an equation for each vertical asymptote (asymptotic discontinuity), if any exist.
2. Identify an equation for each horizontal asymptote, if any exist.
3. Identify the coordinates of any y-intercept or x-intercepts, if any exit.
4. Identify any value of x for which the graph has a hole (removable discontinuity)
5. Draw a neat and accurate graph of the function
6. 

VA:

HA:

X-Intercept(s):

Y-Intercept:

X-Value of Hole:

1. 

VA:

HA:

X-Intercept(s):

Y-Intercept:

X-Value of Hole:

1. 

VA:

HA:

X-Intercept(s):

Y-Intercept:

X-Value of Hole:



1.  or 

VA:

HA:

X-Intercept(s):

Y-Intercept:

X-Value of Hole:



1.  or 

VA:

HA:

X-Intercept(s):

Y-Intercept:

X-Value of Hole:

1.  or 

VA:

HA:

X-Intercept(s):

Y-Intercept:

X-Value of Hole:

1.  or 

VA:

HA:

X-Intercept(s):

Y-Intercept:

X-Value of Hole:

1.  or 

VA:

HA:

X-Intercept(s):

Y-Intercept:

X-Value of Hole:

1.  or 

VA:

HA:

X-Intercept(s):

Y-Intercept:

X-Value of Hole:



1.  or 

VA:

HA:

X-Intercept(s):

Y-Intercept:

X-Value of Hole:

1. 

VA:

HA:

X-Intercept(s):

Y-Intercept:

X-Value of Hole:

1. 

VA:

HA:

X-Intercept(s):

Y-Intercept:

X-Value of Hole: